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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,427	08/10/2001	Shinichi Yamagata	P 281112 SO2-137339C/KOK	5385
7590	12/16/2003		EXAMINER	
McDERMOTT, WILL & EMORY 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096			JENKINS, DANIEL J	
			ART UNIT	PAPER NUMBER
			1742	16

DATE MAILED: 12/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

OBLT

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/925,427	YAMAGATA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Daniel J. Jenkins	1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 22 September 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 36-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 41-49 is/are allowed.
- 6) Claim(s) 35-39 is/are rejected.
- 7) Claim(s) 40 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
  - a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                               | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)           | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ .                                   |

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1. The Examiner has carefully considered Applicant's Response of 9/22/03. Applicant has attempted to overcome the prior art rejection by amending the claims to read outside of the prior art range. However, the end point touching of the prior art to the claimed range to the now amended range still establishes a prima facie case of obviousness. In order to aid in further prosecution, the Examiner notes that recent PTO decisions now support a position that amending to higher lower end point range limitation must be literally supported by the Specification.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 35-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zedalis et al. in view of Weaver.  
Zedalis et al. disclose a method of forming a composite material comprising:
  - providing an aluminum powder (col. 1, lines 61-63);
  - adding a silicon carbide powder to the aluminum powder to form a mixture (col. 3, lines 31-35);
  - compacting said mixture to form a compact (col. 4, lines 54-58); and
  - sintering said compact to form an aluminum/silicon carbide composite material (col. 4, lines 58-64).Zedalis et al. further disclose wherein the sintering takes place at temperature up to 600°C (col. 4, line 64).

However, Zeladis et al. is silent as to the sintering atmosphere, leaving it to one skilled in the art to look at the teaching of the prior art to determine the sintering atmosphere.

Weaver teaches at col. 3, lines 46-54 and col. 4, lines 53-55, to use a nitrogen atmosphere free of oxygen in the same field of endeavor for the purpose of supplying a non-oxidizing atmosphere to sinter aluminum/metal carbides.

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the nitrogen atmosphere of Weaver in the invention of Zedalis et al. in order to provide for a non-oxidizing atmosphere.

Actual overlap of the prior art is not required, mere contact (end-point touching) or close approximation is sufficient to establish a prima facie case of obviousness (see Titanium Metal Corp. v. Banner, (CAFC 1985) 778 F.2d 775, 227 USPQ 575). In the case, the end point touching of the temperature range establishing a prima facie case of obviousness at and around the end-point.

4. Claim 40 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 41-49 are allowable.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Jenkins whose telephone number is 703-306-4157. The examiner can normally be reached on M-TH6:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 703-308-1146. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9593.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Daniel J. Jenkins  
Primary Examiner  
Art Unit 1742

dj  
December 14, 2003